

Navy Times

April 8, 2002

Pg. 14

Carrier Groups To Test Overboard-Sailor Locator

By Christopher Munsey, Times staff writer

Three thousand sailors will soon have a new uniform item: A small gadget that could save their lives if they fall overboard.

Some personnel aboard 20 ships from the Abraham Lincoln and George Washington carrier groups will be issued salt-water activated tracking devices as part of a system test that, if successful, could result in its use fleetwide.

The Navy began to push for the system, called the Man Overboard Indicator system, or MOBI, 18 months ago and is working with the maker to deploy it when the groups get underway this year. The Lincoln could deploy as early as this month.

The tracking devices could speed the rescue of sailors who go overboard or aid the recovery of bodies lost at sea.

"The Navy's interested in making sure to retrieve [a man overboard] alive if we can. And if there's a fatality, we'd still like to recover the body," said Fred Crowson, technical director for the office of the deputy assistant secretary of the Navy for safety.

Sailors working outside the ships' skins, including flight deck crew, small-boat operators, deck-force sailors and those assigned to such duties as underway-replenishment detail, will wear the safety devices, Crowson said.

Each will be issued a three-inch tall, 5.6-ounce transmitter to put in the left pocket of an MK-1 "float coat," clip to a belt or tether to a life jacket. The device has an 18-inch, flexible antenna that secures to a work shirt or coat.

If a sailor goes into the ocean, the transmitter, which floats and broadcasts effectively if immersed as long as the antenna is out of the water, automatically activates within three to five seconds, sending a signal to a receiver aboard ship.

That signal includes an identification number that matches the transmitter to the sailor to whom it was issued. The transmitter also includes a button to switch it off in case it's mistakenly activated.

Powered by a nine-volt battery, the transmitter has a surface-to-surface broadcast range of about two miles and will operate for as long as 36 hours. A helicopter using radio-direction equipment found the transmitter from 20 miles away in tests last year, Navy officials said.

When the receiver on a sailor's ship — or any other that is in range and equipped with MOBI — gets the transmitter's signal through a VHF antenna, it sets off a 100-decibel alarm.

Responding to the alarm, bridge personnel then activate a radio-direction finder. While the ship is launching the man-overboard response, the RDF antenna finds the source of transmitter signal. The RDF flashes a digital indicator of the sailor's location that bridge personnel use to steer toward the sailor. One small boat aboard each ship will also be outfitted with an RDF to use in recovery operations.

The Fleet Technical Support Center, Pacific, in San Diego first tested a prototype of the system, designed by Briar Tek Incorporated, an Alexandria, Va.-based company, in October 2000, said David Mierke, a program manager.

Testers heaved a transmitter-equipped mannequin overboard from the amphibious dock landing ship Harpers Ferry a few miles off San Diego; a small boat equipped with a radio direction finder homed in on the mannequin from less than a mile away, Mierke said.

Sailors participating in the deployment test of MOBI will help determine whether the system accidentally activates in rain and rough weather and gauge how well it holds up to shipboard wear and tear, said Dave Caskey, a spokesman for Naval Sea Systems Command in Washington, D.C.

The MOBI evaluation isn't cheap. An individual transmitter costs \$221 and, all told, the field test will cost more than \$1 million, Caskey said.

NavSea will evaluate the results post-deployment and consult with Pentagon and fleet commanders

to decide whether to deploy indicators Navy-wide, said Caskey.

That decision should come sometime in 2003, he said.

The Navy also is working on other measures to help prevent sailors from falling overboard in the future.

The design of the LPD-17 class ships under construction eliminated life rail and lifeline assemblies in favor of structural bulwarks, NavSea officials said.

NavSea also is exploring whether sailors working topside in certain areas of ships might benefit from

wearing fall arrest/restraint systems similar to those worn by civilian bridge inspectors as they clamber about bridge superstructures.

Another idea being developed by Navy engineers involves significantly reducing the amount of time it takes to complete a shipboard muster.

In the future, sailors might use their individual Common Access Cards to check in at their muster stations, compiling a list of who's aboard electronically.

That method would be much quicker than current muster procedures, Navy officials said.